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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=9; day=3; hr=13; min=58; sec=46; ms=742;]
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Application No: 10586310   Version No: 1.0

Input Set:

Output Set:

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Finished: 2009-08-21 13:40:04.438
Elapsed: 0 hr(s) 0 min(s) 28 sec(s) 556 ms
Total Warnings: 46
Total Errors: 0
No. of SeqIDs Defined: 52
Actual SeqID Count: 52

Error code   Error Description

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W   402   Undefined organism found in <213> in SEQ ID (12)

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W   213   Artificial or Unknown found in <213> in SEQ ID (20)

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W   213   Artificial or Unknown found in <213> in SEQ ID (22)

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                Input Set:


                Output Set:



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             Finished:   2009-08-21 13:40:04.438
              Elapsed:   0 hr(s) 0 min(s) 28 sec(s) 556 ms
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  No. of SeqIDs Defined:   52
    Actual SeqID Count:   52
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Error code   Error Description

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W 213   Artificial or Unknown found in <213> in SEQ ID (27)

W 213   Artificial or Unknown found in <213> in SEQ ID (28)

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W 213   Artificial or Unknown found in <213> in SEQ ID (30)

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W 213   Artificial or Unknown found in <213> in SEQ ID (32)

W 213   Artificial or Unknown found in <213> in SEQ ID (33)
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<110> GARCIA-CALVO, MARIA MARGARITA

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<130> 059893-0121

<140> 10586310
<141> 2009-08-21

<150> PCT/US05/01469
<151> 2005-01-14

<150> 60/537,341
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<160> 52

<170> PatentIn version 3.5

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1               5                   10                  15

gcg gcc cag ggt gag cta tac aca ccc aaa cac gaa gct ggg gtc tgc      96
Ala Ala Gln Gly Glu Leu Tyr Thr Pro Lys His Glu Ala Gly Val Cys
            20                  25                  30

acc ttt tac gaa gag tgc ggg aaa aac cca gag ctc tct gga ggc ctc     144
Thr Phe Tyr Glu Glu Cys Gly Lys Asn Pro Glu Leu Ser Gly Gly Leu
        35                  40                  45

acg tca cta tcc aat gta tcc tgc ctg tct aac acc ccg gcc cgc cac     192
Thr Ser Leu Ser Asn Val Ser Cys Leu Ser Asn Thr Pro Ala Arg His
    50                  55                  60

gtc acg ggt gaa cac ctg gct ctt ctc cag cgc atc tgt ccc cgc ctg     240
Val Thr Gly Glu His Leu Ala Leu Leu Gln Arg Ile Cys Pro Arg Leu
65                  70                  75                  80

tac aac ggc ccc aat acc act ttt gcc tgt tgc tct acc aag cag ctg     288
Tyr Asn Gly Pro Asn Thr Thr Phe Ala Cys Cys Ser Thr Lys Gln Leu
                85                  90                  95
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ctg tcc tta gaa agc agc atg tcc atc acc aag gcc ctt ctc acg cgc          336
Leu Ser Leu Glu Ser Ser Met Ser Ile Thr Lys Ala Leu Leu Thr Arg
            100                 105                 110

tgc ccg gcc tgc tct gac aat ttt gtg agc tta cac tgc cac aac act          384
Cys Pro Ala Cys Ser Asp Asn Phe Val Ser Leu His Cys His Asn Thr
        115                 120                 125

tgc agc cct gac cag agc ctc ttc atc aac gtc acc cgg gtg gtt gag          432
Cys Ser Pro Asp Gln Ser Leu Phe Ile Asn Val Thr Arg Val Val Glu
    130                 135                 140

cgg ggc gct gga gag cct cct gcc gtg gtg gcc tat gag gcc ttt tat          480
Arg Gly Ala Gly Glu Pro Pro Ala Val Val Ala Tyr Glu Ala Phe Tyr
145                 150                 155                 160

cag cgc agc ttt gct gag aag gcc tat gag tcc tgc agc cag gtg cgc          528
Gln Arg Ser Phe Ala Glu Lys Ala Tyr Glu Ser Cys Ser Gln Val Arg
                165                 170                 175

atc cct gcg gcc gct tcc ttg gcc gtg ggc agc atg tgt gga gtg tat          576
Ile Pro Ala Ala Ala Ser Leu Ala Val Gly Ser Met Cys Gly Val Tyr
            180                 185                 190

ggc tcc gcc ctc tgc aat gct cag cgc tgg ctc aac ttc caa gga gac          624
Gly Ser Ala Leu Cys Asn Ala Gln Arg Trp Leu Asn Phe Gln Gly Asp
        195                 200                 205

aca ggg aat ggc ctg gct ccg ctg gat atc acc ttc cac ctc ttg gag          672
Thr Gly Asn Gly Leu Ala Pro Leu Asp Ile Thr Phe His Leu Leu Glu
    210                 215                 220

cct ggc cag gcc cta ccg gat ggg atc cag cca ctg aat ggg aag atc          720
Pro Gly Gln Ala Leu Pro Asp Gly Ile Gln Pro Leu Asn Gly Lys Ile
225                 230                 235                 240

gca ccc tgc aac gag tct cag ggt gat gac tca gca gtc tgc tcc tgc          768
Ala Pro Cys Asn Glu Ser Gln Gly Asp Asp Ser Ala Val Cys Ser Cys
                245                 250                 255

cag gac tgt gcg gcg tcc tgc cct gtc atc cct ccg ccc gag gcc ttg          816
Gln Asp Cys Ala Ala Ser Cys Pro Val Ile Pro Pro Pro Glu Ala Leu
            260                 265                 270

cgc cct tcc ttc tac atg ggt cgc atg cca ggc tgg ctg gcc ctc atc          864
Arg Pro Ser Phe Tyr Met Gly Arg Met Pro Gly Trp Leu Ala Leu Ile
        275                 280                 285

atc atc ttc act gct gtc ttt gtg ttg ctc tct gca gtc ctt gtg cgt          912
Ile Ile Phe Thr Ala Val Phe Val Leu Leu Ser Ala Val Leu Val Arg
    290                 295                 300

ctc cga gtg gtt tcc aac agg aac aag aac aag gca gaa ggc ccc cag          960
Leu Arg Val Val Ser Asn Arg Asn Lys Asn Lys Ala Glu Gly Pro Gln
305                 310                 315                 320

gaa gcc ccc aaa ctc cct cat aag cac aaa ctc tca ccc cat acc atc         1008
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Glu Ala Pro Lys Leu Pro His Lys His Lys Leu Ser Pro His Thr Ile
                325                 330                 335


ctg ggc cgg ttc ttc cag aac tgg ggc aca agg gtg gcc tcg tgg cca          1056
Leu Gly Arg Phe Phe Gln Asn Trp Gly Thr Arg Val Ala Ser Trp Pro
            340                 345                 350


ctc acc gtc tta gca ctg tcc ttc atc gtt gtg ata gcc tta gca gca          1104
Leu Thr Val Leu Ala Leu Ser Phe Ile Val Val Ile Ala Leu Ala Ala
            355                 360                 365


ggc ctg acc ttt att gaa ctc acc aca gac cct gtg gaa ctg tgg tcg          1152
Gly Leu Thr Phe Ile Glu Leu Thr Thr Asp Pro Val Glu Leu Trp Ser
    370                 375                 380


gcc ccc aag agc cag gcc cgg aaa gag aag tct ttc cat gat gag cat          1200
Ala Pro Lys Ser Gln Ala Arg Lys Glu Lys Ser Phe His Asp Glu His
385                 390                 395                 400


ttc ggc ccc ttc ttt cga acc aac cag att ttc gtg aca gct cgg aac          1248
Phe Gly Pro Phe Phe Arg Thr Asn Gln Ile Phe Val Thr Ala Arg Asn
            405                 410                 415


agg tcc agc tac aag tac gac tcc cta ctg cta ggg tcc aag aac ttc          1296
Arg Ser Ser Tyr Lys Tyr Asp Ser Leu Leu Leu Gly Ser Lys Asn Phe
            420                 425                 430


agt ggg atc ctg tcc ctg gac ttc ctg ctg gag ctg ctg gag ctt cag          1344
Ser Gly Ile Leu Ser Leu Asp Phe Leu Leu Glu Leu Leu Glu Leu Gln
        435                 440                 445


gag agg ctt cga cac ctg caa gtg tgg tcc cct gag gca gag cgc aac          1392
Glu Arg Leu Arg His Leu Gln Val Trp Ser Pro Glu Ala Glu Arg Asn
        450                 455                 460


atc tcc ctc cag gac atc tgc tat gcc ccc ctc aac cca tat aac acc          1440
Ile Ser Leu Gln Asp Ile Cys Tyr Ala Pro Leu Asn Pro Tyr Asn Thr
465                 470                 475                 480


agc ctc tcc gac tgc tgt gtc aac agc ctc ctt cag tac ttc cag aac          1488
Ser Leu Ser Asp Cys Cys Val Asn Ser Leu Leu Gln Tyr Phe Gln Asn
            485                 490                 495


aac cgc acc ctc ctg atg ctc acg gcc aac cag act ctg aat ggc cag          1536
Asn Arg Thr Leu Leu Met Leu Thr Ala Asn Gln Thr Leu Asn Gly Gln
            500                 505                 510


acc tcc ctg gtg gac tgg aag gac cat ttc ctc tac tgt gca aat gcc          1584
Thr Ser Leu Val Asp Trp Lys Asp His Phe Leu Tyr Cys Ala Asn Ala
            515                 520                 525


cct ctc acg ttc aaa gat ggc acg tct ctg gcc ctg agc tgc atg gct          1632
Pro Leu Thr Phe Lys Asp Gly Thr Ser Leu Ala Leu Ser Cys Met Ala
    530                 535                 540


gac tac ggg gct cct gtc ttc ccc ttc ctt gct gtt ggg gga tac caa          1680
Asp Tyr Gly Ala Pro Val Phe Pro Phe Leu Ala Val Gly Gly Tyr Gln
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ggc acg gac tat tcc gag gca gaa gcg ctg atc ata acc ttc tct ctc        1728
Gly Thr Asp Tyr Ser Glu Ala Glu Ala Leu Ile Ile Thr Phe Ser Leu
            565              570              575

aat aac tac ccc gct gat gat ccc cgc atg gcc cag gcc aag ctc tgg        1776
Asn Asn Tyr Pro Ala Asp Asp Pro Arg Met Ala Gln Ala Lys Leu Trp
            580              585              590

gag gag gct ttc ttg aag gaa atg gaa tcc ttc cag agg aac aca agt        1824
Glu Glu Ala Phe Leu Lys Glu Met Glu Ser Phe Gln Arg Asn Thr Ser
            595              600              605

gac aag ttc cag gtt gcg ttc tca gct gag cgc tct ctg gag gat gag        1872
Asp Lys Phe Gln Val Ala Phe Ser Ala Glu Arg Ser Leu Glu Asp Glu
         610              615              620

atc aac cgc acc acc atc cag gac ctg cct gtc ttt gcc gtc agc tac        1920
Ile Asn Arg Thr Thr Ile Gln Asp Leu Pro Val Phe Ala Val Ser Tyr
625              630              635              640

att atc gtc ttc ctg tac atc tcc ctg gcc ctg ggc agc tac tcc aga        1968
Ile Ile Val Phe Leu Tyr Ile Ser Leu Ala Leu Gly Ser Tyr Ser Arg
            645              650              655

tgc agc cga gta gcg gtg gag tcc aag gct act ctg ggc cta ggt ggg        2016
Cys Ser Arg Val Ala Val Glu Ser Lys Ala Thr Leu Gly Leu Gly Gly
            660              665              670

gtg att gtt gtg ctg gga gca gtt ctg gct gcc atg ggc ttc tac tcc        2064
Val Ile Val Val Leu Gly Ala Val Leu Ala Ala Met Gly Phe Tyr Ser
            675              680              685

tac ctg ggt gtc ccc tct tct ctg gtt atc atc caa gtg gta cct ttc        2112
Tyr Leu Gly Val Pro Ser Ser Leu Val Ile Ile Gln Val Val Pro Phe
         690              695              700

ctg gtg cta gct gtg gga gct gac aac atc ttc atc ttt gtt ctt gag        2160
Leu Val Leu Ala Val Gly Ala Asp Asn Ile Phe Ile Phe Val Leu Glu
705              710              715              720

tac cag agg cta cct agg atg cct ggg gaa cag cga gag gct cac att        2208
Tyr Gln Arg Leu Pro Arg Met Pro Gly Glu Gln Arg Glu Ala His Ile
            725              730              735

ggc cgc acc ctg ggc agt gtg gcc ccc agc atg ctg ctg tgc agc ctc        2256
Gly Arg Thr Leu Gly Ser Val Ala Pro Ser Met Leu Leu Cys Ser Leu
            740              745              750

tct gag gcc atc tgc ttc ttt cta ggg gcc ctg acc ccc atg cca gct        2304
Ser Glu Ala Ile Cys Phe Phe Leu Gly Ala Leu Thr Pro Met Pro Ala
            755              760              765

gtg agg acc ttc gcc ttg acc tct ggc tta gca att atc ctc gac ttc        2352
Val Arg Thr Phe Ala Leu Thr Ser Gly Leu Ala Ile Ile Leu Asp Phe
         770              775              780
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ctg ctc cag atg act gcc ttt gtg gcc ctg ctc tcc ctg gat agc aag          2400
Leu Leu Gln Met Thr Ala Phe Val Ala Leu Leu Ser Leu Asp Ser Lys
785             790             795             800

agg cag gag gcc tct cgc ccg gat gtc tta tgc tgc ttt tca acc cgg          2448
Arg Gln Glu Ala Ser Arg Pro Asp Val Leu Cys Cys Phe Ser Thr Arg
                805             810             815

aag ctg ccc cca cct aaa gaa aaa gaa ggc ctc tta ctc cgc ttc ttc          2496
Lys Leu Pro Pro Pro Lys Glu Lys Glu Gly Leu Leu Leu Arg Phe Phe
            820             825             830

cgc aag ata tac gct cct ttc ctg ctg cac aga ttc atc cgc cct gtt          2544
Arg Lys Ile Tyr Ala Pro Phe Leu Leu His Arg Phe Ile Arg Pro Val
        835             840             845

gtg atg ctg ctg ttt ctg acc ctg ttt gga gca aat ctc tac tta atg          2592
Val Met Leu Leu Phe Leu Thr Leu Phe Gly Ala Asn Leu Tyr Leu Met
    850             855             860

tgc aac atc aac gtg ggg cta gac cag gag ctg gct ctg ccc aag gac          2640
Cys Asn Ile Asn Val Gly Leu Asp Gln Glu Leu Ala Leu Pro Lys Asp
865             870             875             880

tcg tac ttg ata gac tac ttc ctc ttt ctg aac cga tac ctt gaa gtg          2688
Ser Tyr Leu Ile Asp Tyr Phe Leu Phe Leu Asn Arg Tyr Leu Glu Val
                885             890             895

ggg cct cca gtg tac ttt gtc acc acc tcg ggc ttc aac ttc tcc agc          2736
Gly Pro Pro Val Tyr Phe Val Thr Thr Ser Gly Phe Asn Phe Ser Ser
                900             905             910

gag gca ggc atg aac gcc act tgc tct agc gca ggc tgt aag agc ttc          2784
Glu Ala Gly Met Asn Ala Thr Cys Ser Ser Ala Gly Cys Lys Ser Phe
        915             920             925

tcc cta acc cag aaa atc cag tat gcc agt gaa ttc cct gac cag tct          2832
Ser Leu Thr Gln Lys Ile Gln Tyr Ala Ser Glu Phe Pro Asp Gln Ser
        930             935             940

tac gtg gct att gct gca tcc tcc tgg gta gat gac ttc atc gac tgg          2880
Tyr Val Ala Ile Ala Ala Ser Ser Trp Val Asp Asp Phe Ile Asp Trp
945             950             955             960

ctg acc ccg tcc tcc tcc tgc tgt cgc ctt tat ata cgt ggc ccc cat          2928
Leu Thr Pro Ser Ser Ser Cys Cys Arg Leu Tyr Ile Arg Gly Pro His
                965             970             975

aag gat gag ttc tgt ccc tca acg gat act tcc ttc aac tgc tta aaa          2976
Lys Asp Glu Phe Cys Pro Ser Thr Asp Thr Ser Phe Asn Cys Leu Lys
                980             985             990

aac tgc atg aac cgc act ctg ggt  cct gtg agg ccc aca  gcg gaa cag         3024
Asn Cys Met Asn Arg Thr Leu Gly  Pro Val Arg Pro Thr  Ala Glu Gln
        995             1000             1005
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ttt cat  aag tac ctg ccc tgg  ttc ctg aat gat ccg  ccc aat atc        3069
Phe His  Lys Tyr Leu Pro Trp  Phe Leu Asn Asp Pro  Pro Asn Ile
    1010              1015              1020

aga tgt  ccc aaa ggg ggt cta  gca gcg tat aga acg  tct gtg aat        3114
Arg Cys  Pro Lys Gly Gly Leu  Ala Ala Tyr Arg Thr  Ser Val Asn
    1025              1030              1035

ttg agc  tca gat ggc cag gtt  ata gcc tcc cag ttc  atg gcc tac        3159
Leu Ser  Ser Asp Gly Gln Val  Ile Ala Ser Gln Phe  Met Ala Tyr
    1040              1045              1050

cac aag  ccc tta agg aac tca  cag gac ttc aca gaa  gct ctc cgg        3204
His Lys  Pro Leu Arg Asn Ser  Gln Asp Phe Thr Glu  Ala Leu Arg
    1055              1060              1065

gcg tcc  cgg ttg cta gca gcc  aac atc aca gct gac  cta cgg aag        3249
Ala Ser  Arg Leu Leu Ala Ala  Asn Ile Thr Ala Asp  Leu Arg Lys
    1070              1075              1080

gtg cct  ggg aca gat cca aac  ttt gag gtc ttc cct  tac acg atc        3294
Val Pro  Gly Thr Asp Pro Asn  Phe Glu Val Phe Pro  Tyr Thr Ile
    1085              1090              1095

tcc aac  gtg ttc tac cag caa  tac ctg acg gtc ctt  cct gag gga        3339
Ser Asn  Val Phe Tyr Gln Gln  Tyr Leu Thr Val Leu  Pro Glu Gly
    1100              1105              1110

atc ttc  acc ctt gct ctt tgc  ttt gtg ccc acc ttt  gtt gtc tgc        3384
Ile Phe  Thr Leu Ala Leu Cys  Phe Val Pro Thr Phe  Val Val Cys
    1115              1120              1125

tac ctc  cta ctg ggc ctg gac  atg tgc tca ggg atc  ctc aac cta        3429
Tyr Leu  Leu Leu Gly Leu Asp  Met Cys Ser Gly Ile  Leu Asn Leu
    1130              1135              1140

ctc tcc  atc att atg att ctc  gtg gac acc att ggc  ctc atg gct        3474
Leu Ser  Ile Ile Met Ile Leu  Val Asp Thr Ile Gly  Leu Met Ala
    1145              1150              1155

gtg tgg  ggt atc agc tat aat  gcg gta tcc ctc atc  aac ctt gtc        3519
Val Trp  Gly Ile Ser Tyr Asn  Ala Val Ser Leu Ile  Asn Leu Val
    1160              1165              1170

acg gca  gtg ggc atg tct gtg  gag ttt gtg tcc cac  atc act cgg        3564
Thr Ala  Val Gly Met Ser Val  Glu Phe Val Ser His  Ile Thr Arg
    1175              1180              1185

tcc ttt  gct gta agc acc aag  cct acc cgg ctg gag  agg g
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